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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,577	01/24/2002	Naohiro Hirose	KON-1707	5337

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EXAMINER
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RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/056,577

Applicant(s)

HIROSE ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 15 July 2005 has been entered.

### ***Election/Restrictions***

Claims 2-5 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected processes, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 28 August 2003. The basis for the restrictions presented in the Office action of 29 January 2003 remains applicable to the claims.

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Nozawa *et al.* in US Patent 6,555,281.

This rejection was presented in the previous Office actions. As noted previously, Nozawa discloses in Example 34 a toner having a binder resin and a colorant with SF-1 of 160 and SF-2 of 136. The ratio of SF-1/SF-2 is 1.18. This example has 8.0 number % of particles

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with a size of 4 microns or less and an average size of 7.1 microns (Table 11 relying on Table 7, col. 33, l. 47-55). Based on the small number of particles having a size of 4 microns or less and the average particle size at 7.1 microns it appears that the reference inherently has less than 5 % by number of particles with a size of 0.60 to 1.00 microns according to the method of determination required by the claims. Further, the reference specifically discloses as small as 3 % number of particles having a size of 4 microns or smaller (col. 11, l. 9-30). Nozawa teaches that the average particle size of the toner is substantially larger than diameter range of interest in the claims (i.e., 0.60 to 1.00 microns). Nozawa also teaches that the number of small toner particles is minimized to reduce excessive charging in a low humidity environment (col. 11, l. 22-30). Based on the cumulative teachings, Nozawa would by necessity produce less than 5 % by number of particles with a size of 0.60 to 1.00 microns according to the method of determination required by the claims.

Applicants traverse this rejection based on an unexecuted declaration under Rule 132. In this declaration, Example 34 of Nozawa was reproduced as discussed. A review of the declaration shows that this reproduced toner has the SF-1 and SF-2 values disclosed by Nozawa as well as the number of particles of from 2 to 4 microns. The declaration also shows in Table 1 that the ratio of toner particles with a diameter from 0.60 to 1.00  $\mu\text{m}$  is 5.2%. This value is outside the scope of the claims.

Although it appears from the unexecuted declaration that Nozawa's toner has a ratio value outside the scope of the claims, it is noted that the value of 5.2% is very near the ratio value of 5.0% permitted by the claims. The declaration and specification, from which the declaration relies for the particle diameter testing method, do not specify the error associated with the diameter measurement. If the error value for the ratio is  $\pm 0.1 \mu\text{m}$  then the reference would not be anticipatory. However, if the error value is  $\pm 0.2 \mu\text{m}$  then the reference would still

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be anticipatory because the claimed value of 5.0 % is included within the experimental measurement of the diameter measurement test. At present the evidence is not probative because the data is not statistically significant, as well as the fact that the declaration is not executed. The evidence also does not specify if the same average particle diameter (D4) is obtained in the declaration example as is present in Nozawa. This feature is significant because the average particle diameter has been specifically relied upon in the rejection as a basis for asserting that the claimed ratio of particles between 0.60 and 1.00  $\mu\text{m}$  is inherently present.

Applicants have also not explained why they chose the specific pulverization device and pneumatic classifier as discussed in ¶ 4. Although this may be a reasonable device choice because the reference does not specify the pulverization device and pneumatic classifier used, declarant must address the reasons for the choice as it relates to the desired toner of the reference. The comparative data is noted, particularly the image density after 50,000 copies, but presentation of unexpected results is not effective to overcome a rejection under section 102 because the reference discloses the same toner as is being claimed.

The rejection is maintained.

Claims 1 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hashimoto *et al.* in US Patent 6,610,454 considered with Yachi *et al.* in US Patent 5,773,185.

Hashimoto was discussed in the prior Office actions as disclosing a toner having a binder resin and a colorant, which, in Example 11 has SF-1 of 135 and SF-2 of 111 to give a ratio of SF-1/SF-2 of 1.22. The average particle size of this toner is 6.4 microns. Based on the average particle size at 6.4 microns it appears that the reference inherently has less than 5 % by number of particles with a size of 0.60 to 1.00 microns according to the method of

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determination required by the claims because few particles would be present at sizes substantially far from the average. This example is particularly pertinent to claims 1 and 6. Hashimoto also discloses in Example 29 a toner having the requisite components and SF-1 of 158 and SF-2 of 140 to give a ratio of SF-1/SF-2 of 1.13. The average particle size of this toner is 10.5 microns. Based on the average particle size at 10.5 microns it appears that the reference inherently has less than 5 % by number of particles with a size of 0.60 to 1.00 microns according to the method of determination required by the claims because few particles would be present at sizes substantially far from the average. This example is particularly pertinent to claims 1, 7, and 8.

Hashimoto also uses a suspension polymerization method for forming the toner, which appears to be a method disclosed as effective by the instant specification (p. 26). The use of the calcium phosphate dispersion stabilizer would appear to aid in providing a narrow particle size distribution. Yachi teaches that the addition of a dispersant in a suspension polymerization process, such as calcium phosphate, would be expected to give a suspension resulting in toner with a sharp particle size distribution (see Yachi col. 14, l. 42-49; col. 15, l. 17-50). Yachi specifically teaches as effective a process where the inorganic dispersant is formed in the reaction medium (col. 15, l. 37-42). This process is used by Hashimoto in Example 17. Given this teaching of a sharp particle distribution using a suspension polymerization method disclosed by Hashimoto and the disclosure of a toner with an average size of 6.4 microns, the artisan would expect a small number of toner particles within the size range of 0.60 and 1.00 microns.

Although it appears from the unexecuted declaration that Hashimoto's toner has a ratio value outside the scope of the claims, it is noted that the value of 5.1% for "Hashimoto 2" is very near the ratio value of 5.0% permitted by the claims. The declaration and specification, from

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which the declaration relies for the particle diameter testing method, do not specify the error associated with the diameter measurement. If the error value for the ratio is  $\pm 0.1 \mu\text{m}$  then the reference would be anticipatory because the claimed value of 5.0 % is included within the experimental measurement of the diameter measurement test. The evidence also does not specify if the same average particle diameter is obtained in Hashimoto 2 as in Example 29 of the reference (i.e.,  $10.5 \mu\text{m}$ ). This feature is significant because the average particle diameter has been specifically relied upon in the rejection as a basis for asserting that the claimed ratio of particles between  $0.60$  and  $1.00 \mu\text{m}$  is inherently present. At present the evidence is not probative because the data is not statistically significant, as well as the fact that the declaration is not executed.

Applicants have also not explained why they chose the specific pulverization device and pneumatic classifier as discussed in ¶ 8. Although this may be a reasonable device choice because the reference does not specify the pulverization device and pneumatic classifier used, declarant must address the reasons for the choice as it relates to the desired toner of the reference. The comparative data is noted, particularly the image density after 50,000 copies, but presentation of unexpected results is not effective to overcome a rejection under section 102 because the reference discloses the same toner as is being claimed.

The rejection is maintained.

### ***Claim Rejections - 35 USC § 103***

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto *et al.* in US Patent 6,610,454 in view of Yachi *et al.* in US Patent 5,773,185.

Applicants traverse this rejection on the basis of the declaration of record including the showing of unexpected results. The Examiner has carefully considered the declaration but it is

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not persuasive for the reasons given above concerning Hashimoto. Further, with respect to claim 9, the toners described as inventive do not appear to contain the compound represented by the specific formula because Hashimoto's toners are reproduced. These toners admittedly do not contain the compound of the formula. This is why the rejection is under section 103. The supporting Yachi reference provides a disclosure of the compound given by the formula and motivation for its use. However, a showing of unexpected results must be made with the toner included within the scope of the claims. It appears that the toners identified as Inventive 1, 2, and 3 are outside the scope of the claim. Clarification is requested.

The rejection is still seen as proper and is maintained.



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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr  
10 August 2005

  
**CHRISTOPHER RODEE**  
**PRIMARY EXAMINER**